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KaraTek International
Preparing for a
Church-Based Radio Station
For Churches in the United States

by Martin Gibbs for KaraTek International

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Introduction

A church-sponsored radio station can be an effective extension of the local church's ministry into their community. Of course, the radio station can be a beacon proclaiming the Gospel of Jesus Christ, but it also is a great tool for teaching and Christian growth, for building strong families, and even for Godly entertainment.

This document specifically addresses *over-the-air* broadcast radio. KaraTek International also provides services to set up Internet-based radio stations, please contact us for further information regarding this type of station.

Planning, constructing and operating a broadcast radio station requires a considerable investment in time, energy and finances, but the rewards of such a ministry can be great, and a church committed to a broadcast ministry will find it effective in changing lives for Christ.

In this document, we will explore the many facets of applying for, building and operating a church-operated Christian radio station. Remember that if you have any questions about any of this material, please feel free to contact KaraTek International and we will do our best to provide answers to those questions.

KaraTek International provides its services to qualified organizations either on cost-free or cost-reimbursed rates, and provides many, but not all, of the professional services necessary to secure a construction permit, build the facility, and train your operators. For services we are unable to provide, we have a network of engineering and legal consultants and ministry partners, enabling us to provide a single point of contact for our clients.

One of KaraTek's primary missions goals is that our projects become *self sustaining*, meaning that your organization is able to run its radio station on a day-to-day basis. KaraTek remains available to help with significant technical problems and to assist in other areas such as program distribution, but our main efforts are in broadcast station construction and training.

Qualified Organizations

KaraTek International has specific requirements for every ministry we partner with, and your ministry must meet these requirements before we can assist you in applying for and constructing your radio station. Please read these carefully. We whole heartedly desire to help you realize your God-inspired dream of having a radio station for His glory, but first must make sure our missions are compatible before we can work with you.

Non-profit

You must have a non-profit organization that is committed to proclaiming the true Gospel of Jesus Christ to a world that is, for the most part, lost and on a path to eternal destruction.

Doctrine

Your organization must agree completely with KaraTek International's statement of faith and sign a covenant to that effect. You'll find our statement of faith and covenant in **Appendix 1** of this document.

Biblical Standards

Your organization must pledge to adhere to Bible-based standards in operating your radio station. KaraTek has no desire to regulate or be directly involved in what our clients broadcast, yet we believe that the church must use Bible standards in each and every ministry, including radio. We ask that your radio station not broadcast music that, even if it has "Christian" lyrics, emphasizes beat over melody, or has lyrics that are hard to understand or excessively repetitive. We also request that teaching and preaching programs do not attack the inspiration or inerrancy of the Bible, and that programming that exalts man and his accomplishments over God not be aired. For the most part, adhering to doctrines that agree with our doctrinal statement will prevent these errors. At the same time, the Federal Communications Commission, or FCC, has requirements that radio stations serve their communities, and we believe that this can be accomplished through a careful balance and a servant's attitude toward your neighbors and community.

• KaraTek International to be sole Technical Coordinator In order for your project to be successful, KaraTek must be in charge of all technical aspects of your project, including the selection of your equipment, assistance with permits (you will be required to complete some tasks in this area), and engagement of other consulting professionals. Decisions on whether a particular aspect of your project is sufficient are to be made by KaraTek. This is especially important in areas of safety, relating to structures and electrical systems.

As we have stated elsewhere, KaraTek is very sensitive to cost issues, but we will not sacrifice having a quality project that is safe and a good testimony simply for the sake of saving money. We also work frequently with other ministries on projects, but coordination with these other ministries must be through KaraTek.

An agreement for you to authorize KaraTek to act on your behalf is also contained in **Appendix 1**.

Commitment

A broadcast radio station represents a large commitment of prayer, time, money and other church resources. Your organization must be committed to operating and maintaining your radio ministry for the long-term.

- Commitment of the Entire Organization
 Your church or other organization must be completely committed to the application, construction and operation of a radio station. Dissention will destroy the project and its outreach, and must be addressed before even starting the process.
- Dedicated Staff
 Staff that has the time and technical abilities to operate the radio station must be committed to the task. Depending on the size and complexity of the station, this can range from a part-time individual to several persons. However, these persons do not need to be experienced in radio, as KaraTek can both provide training as well as direct your organization to other training resources. The best qualifications are some understanding of technical subjects, such as computers or other electronics, a willing heart and a desire to see the ministry succeed.
- Long-term commitment
 We at KaraTek desire to see radio stations established through our ministry that reach their communities for the Lord Jesus Christ for the longest possible time. Because radio stations are hard to acquire, there is strong pressure in the marketplace for the purchase of a radio station, often at huge profits for the sellers. This is known in the broadcast radio marketplace as "flipping" a station, and KaraTek has no desire to use our limited resources for another's profit. This can be especially tempting when a church or organization experiences financial difficulties. We ask for all our clients to commit to operating their radio station for a minimum of 5 years.

Radio Station Overview

So, what exactly is a radio station, and how does it work? In this section, we'll give you a general layout of a typical radio station, and point out differences between the various types. If you don't have a technical background, you'll want to carefully read the following to help you have a better understanding of radio stations.

A radio station takes an *audio* (or sound) signal and converts it to a form that can be *broadcast* over a certain area using a much higher frequency, called a *radio frequency*. *Frequency*, by the way, refers to how rapidly an electrical signal changes direction, normally measured in *Hertz*, or Hz, which is how many times it changes direction per second.

Many years ago, pioneers in electricity discovered that these radio frequencies could be fed to an *antenna* where they would travel far from their original source, and could be picked up, or *received* many miles from the broadcasting station.

The term *broadcasting* refers to the ability of one radio station to provide a signal to a theoretically unlimited number of receivers, and is one of radio's biggest advantages, where many people can freely access the same signal.

All radio stations consist of at least three components (see Figure 1):

- 1. The *audio source*, or source of the sound that will be broadcast. This can be as simple as a microphone connected to an *amplifier* (a device that increases the level of signal coming from the microphone).
- 2. The *transmitter* converts the audio signal into the radio frequency that can be broadcast to the receiver. Generally, the audio signal is encoded on the radio frequency by either changing the frequency of that signal (*frequency modulation*, or FM) or the strength (*amplitude modulation*, or AM).
- 3. The *antenna* transfers the energy from the transmitter and radiates it into space for the receiving antenna to pick it up.

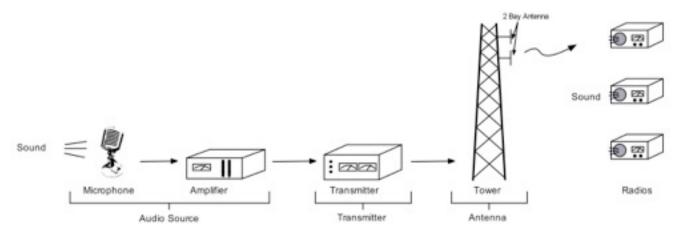


Figure 1. Basic Radio Station

As a station design becomes more complex and transmitters more powerful, each of these functions increase in their complexity.

Most radio stations have a *studio* where the broadcasts originate. This allows them to broadcast from a setting where multiple sources of audio can be routed to the transmitter, allowing so-called *live* programs that are aired immediately, recorded programs, music, satellite-based programming and other options to be routed to the transmitter in an orderly fashion. In today's environment, a computer is central to the studio, since it can help in keeping the programming in order, and also serves as a source to store (record) and play back programming.

In some cases, whether to increase coverage area or to comply with a requirement of the station license, the transmitter may not be located next to the studio. In these situations, a *studio-transmitter-link*, or STL would be necessary to bring the audio signal from the studio to the transmitter. There are many ways of doing this, but the most common is actually a dedicated radio transmitter/receiver that uses a different radio frequency to accomplish this task. Accompanying STL installations are the requirement for a *remote control* that allows the transmitter to be controlled from the studio. *Figure 2* shows a typical STL and remote control setup.

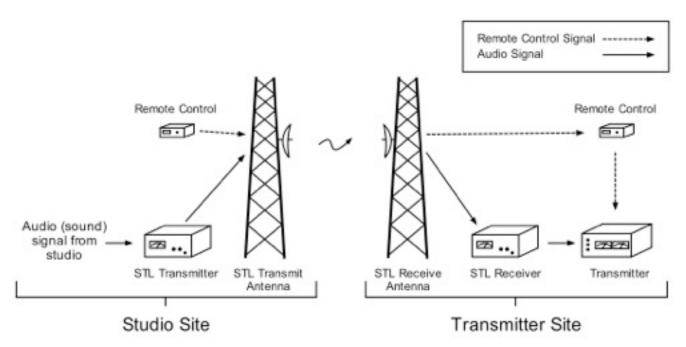


Figure 2. STL (Studio-Transmitter Link) and transmitter Remote Control

Transmitters come in a wide variety of sizes, power levels and costs. Depending on the *coverage area* of the station, a small, inexpensive and simple transmitter may be all that is required. The highest powered transmitters can cost tens or even hundreds of thousands of dollars.

The antenna is normally mounted on a *tower* which is used to support the antenna. In the case of many AM stations, the tower and antenna are one and the same. The height of the tower for AM stations is usually determined by the frequency used to broadcast the signal, while FM towers generally follow the rule that a higher location is better for FM signals. In many stations, more complex FM antennas are used because they have higher *gain*, which allows the transmitter to be of lower power since these high gain antennas concentrate the signal toward the horizon rather than out of space, where the signal is of no value. Refer to *Figure 3* for a diagram of an FM antenna system.

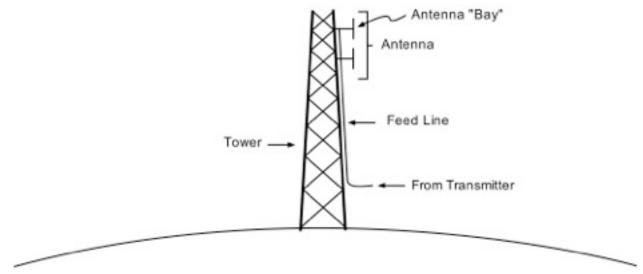


Figure 3. FM Antenna System

Many radio stations also have a *Production Studio* where special programming is created or put together to either air live or at a later time.

Types of Stations

There are several types of radio stations that can be used effectively for church ministries. Choosing the right type of station depends on many factors, including cost, the availability of frequencies, area to be covered, and how the station is to be financed.

Here are the common types of broadcast radio stations:

AM

AM refers to *Amplitude Modulation*, which is a method used to place the audio signal onto the radio frequency signal by changing the amplitude of the radio signal in step with the audio. AM was the first broadcast technology and has been used for broadcasting since the 1920's. Frequencies for AM range from 550 kHz (*kilohertz*, or thousands of cycles per second) to 1710 kHz. AM frequencies behave differently after dark, and can travel many thousands of miles. Thus, the FCC requires most AM stations to change their operating parameters after sunset. AM stations are all *commercial* in nature, meaning that advertisements may be aired on them to generate revenue. AM stations have lower fidelity than their FM counterparts, and are generally more complex to design and construct.

AM stations can require a number of acres of land to accommodate a *grounding* system that is part of the antenna and necessary for proper operation. Often, an AM station must be *directional*, where the direction the signal is aimed needs to be changed in order to keep from interfering with other stations. In this case, multiple towers are erected to control which direction the signal goes, adding to the construction and operating expense. AM antennas are usually located in a valley or on flat lands to accommodate the large amount of acreage that is necessary. Since AM signals follow the ground, it is not necessary to locate them at a high elevation.

When an AM station becomes the best option for a church, KaraTek uses other ministry partners to investigate the potential for the station, then to design and construct it.

FM

FM is the abbreviation for *Frequency Modulation*, where the radio frequency is changed by the audio signal being broadcast. In the U.S., FM stations range from 88 MHz (*megahertz*, or millions of cycles per second) to 108 MHz. FM signals are considered to be generally *line-of-sight* where they pretty much transmit to areas that are within view of the antenna, although they do penetrate through buildings and "bend" a little over mountains. They pretty much behave the same both day and night, and so are considered to be much more consistent than AM. The fidelity of FM stations is higher, enabling broadcast in stereo (two channels), and, more recently multiple channels using digital technology. Because they are line-of-sight, FM antennas are usually located on a high location, such as a mountain top or tall tower.

There are 4 types of FM stations in the United States:

- Commercial stations are licensed to sell air time using commercials that provide revenue for the station. These normally operate at frequencies from 92 MHz to 108 MHz, and at power levels from just over 100 watts up to 100 kilowatts, or 100,000 watts. Note that having a commercial station does not prevent you from receiving donations to support the station.
- Non-Commercial Educational, or NCE, FM stations are, as their name implies, not allowed to broadcast commercials for their support. The must rely on donations to continue their operation, although they are permitted to take donations from businesses, often called *underwriting grants*, to support the station. These businesses are then able to have *sponsorship announcements* on the station. Like their commercial counterparts, non-commercial stations may vary from as little as just over 100 watts up to 100 kilowatts in power. Normally, non-commercial stations operate from 88 MHz to 92 MHz.
- Low-Powered FM, or LPFM, stations are a recent addition to the options for churches and other organizations. They are limited in the amount of power that they can broadcast, and must (at least as of this writing) accommodate changes to Commercial and Non-Commercial stations by changing their frequency or simply going off the air. In spite of this, these stations are becoming more popular and, with upcoming changes to the FCC's rules mandated by Congress, will become more available and protected. Low powered stations are limited in both power and the height of the antenna to prevent them from having too much coverage area. Generally, the maximum power of an LPFM station is 100 watts, yielding coverage of from 5 to 10 miles from the station, which can still be a significant listening area. These stations can operate anywhere on the FM band.

Low powered stations are also limited to one station per owner, which would normally not be a problem for a local church, and must be operated by a non-profit organization on a non-commercial basis, including the use of sponsors and underwriting grants but not airing commercials.

Translators are devices that take the audio signal from a Commercial or Non-Commercial FM station and translate, or rebroadcast that signal to another area on a different frequency. Translators are considered a secondary service, meaning that changes to Commercial and Non-Commercial stations (not LPFM as of this writing) can mean the translator must change frequencies or even go off the air.

Translators are also divided into Commercial and Non-Commercial categories. Commercial translators must be located close to the originating station or owned by someone else, and must receive their signal from off the air. Non-commercial translators can be owned by anyone, and can get their signal from off-the-air, by satellite, or even the Internet. Each translator must repeat the signal of the same

type (Commercial or Non-Commercial) station, except for 30 seconds every hour where the translator can identify itself and ask for donations for the sponsoring organization. Commercial Translators operate from 92 to 108 MHz, while Non-Commercial translators generally operate from 88 to 92 MHz.

Translators range from a few watts up to 250 watts, and cover an area similar to an LPFM station.

KaraTek has partner ministries that can provide a signal to operate a churchsponsored translator station.

• HD Radio, or digital radio, is a new service that encodes the audio signal using digital techniques similar to those in the mobile phone industry. The main advantage is a clearer signal with little noise, and it can be used on all types of FM and even AM stations. In spite of this, HD is a newer technology that can have smaller coverage areas and cost is relatively high. KaraTek feels that it is of little use for most church-based radio stations.

Balancing this, HD does allow the use of up to 3 *channels* of programming on FM stations, where each one can be a completely different program. This can be useful where a church has a multi-lingual outreach.

Cost to Build and Operate

The number-one question we receive at KaraTek International when discussing church-based radio stations is "How much will it cost?" At the risk of using an old cliché, the answer is "it depends".

From our discussion to this point, there are a wide variety of station configurations available for ministry use. Generally, lower powered and simpler stations are less expensive, while directional AM facilities and high-powered FM stations are more expensive. On the other hand, larger stations cover much more area, and can thus have an impact on a much wider audience.

Studio layout, equipment choices and complexity are also factors that can significantly affect the cost. If a building or tower is already available, the cost to build the station will be much less.

The availability of frequencies in an area can affect the cost, as much more engineering and legal expenses are necessary to have the application as strong as possible to "win" in competitive cases.

Our basic recommendation is that a church or ministry has a minimum of \$20,000 available for an LPFM station, and about \$10,000 for an FM translator station. All projects that KaraTek participates in are carefully budgeted and estimates for a specific situation are produced once enough information is available to make a reasonable estimate.

Station operation costs are also subject to a number of factors. Major costs are utilities, rent or property payments, paid staff and license fees. Costs can range from a few hundred dollars a month to thousands of dollars per month. KaraTek will work with your ministry to establish an operating budget. We also require operating costs to be planned for with a preliminary budget. Also, we require 6 months of operating expenses to be set aside prior to station construction.

One expense that is unique to radio stations is *music licensing*. Radio stations, as of this writing, are exempt from paying the performers of songs that are aired on the station, but must still pay the writers of those songs. This is usually done through a *blanket license*, which covers all music aired on the station. In the United States, 3 organizations cover nearly all licensing for song writers: ASCAP (American Society of Composers, Authors and Publishers), SESAC (originally the Society of European Stage Authors & Composers) and BMI (Broadcast Music, Incorporated). If the radio station also *streams*, or sends its signal to listeners through the Internet, there are additional songwriter and performance fees. KaraTek can help guide a new radio station operator through contracts with these organizations.

Funding for operation of the station can come from a number of sources. Usually, when a church-based station is first established, members of the church become the first supporters. As the station expands and fulfills its obligation to be a community resource, more support will be supplied from outside the church. In addition, sponsorship and underwriting grants, and, if the station is

licensed as a commercial radio station, advertisements, can also help meet ongoing financial needs.

Programming

A radio station can only be an effective ministry tool when it has effective *programming*, which is all the audio material, such as special shows, church services, announcer comments, music and so forth. Setting up a *program schedule* is an essential part of the operation of a broadcast radio station.

A weekly schedule is most commonly used. Most people perform their regular activities, whether it is working, attending church or school, volunteer activities and recreation on the basis of what day of the week it is. Thus, in order to fit into your listeners' schedules, setting up a weekly schedule that is consistent will minister better to their needs.

A wide variety of quality programs are available for Bible-believing, Gospel-proclaiming church-based radio stations. Programs should be selected based on how you feel you can best reach your listeners. Remember that the best stations keep all their listeners in mind; yours will be a mixture of the lost, those that are saved but aren't faithful to the Lord, church members, young and old, different ethnic backgrounds and dedicated, serving Christians. Keeping programming interesting and captivating is a challenge for any radio station.

In any modern radio station, a computer-based *automation system* keeps the station delivering the programming in a predictable and professional manner, provided that the system is set up and maintained properly. This vital tool allows you to run your station up to 24 hours a day, even when no one is at the studio.

KaraTek can assist your church or organization in this area by recommending programs, providing music libraries, and setting up the automation system.

Obligations and Duties of Staff

As we emphasized earlier, operation of a radio station does require a significant commitment, including dedicated staff that will keep the station in compliance with the law, as well as broadcasting the essential message of the Gospel in the most effective manner. Depending on the size and complexity of the station's operations, the total staff can range from one to several individuals.

The first duty that must be assigned is that of the *Chief Operator*. This is the only staff position that is required by the FCC, and it is essential that a reliable, competent person be given this position. This person does not need to know all the technical details of station operation, but they must become familiar with FCC requirements and performing regular duties.

The Chief Operator must be available during *normal business hours*, which you can set but are generally 8 hours per day, Monday through Friday. Usually, the Chief Operator must assure that all requirements, such as licenses and registrations, station maintenance, and documentation are correct and in compliance with FCC rules.

A couple of areas that the FCC has been especially interested in recently are the *Public File* and the *Emergency Alert System*, or EAS. These are responsibilities of the Chief Operator.

- Public File
 - The Chief Operator must maintain a file that contains items that may be of interest to the general public, in an area that is accessible to anyone during normal business hours. This file contains licensing documents, letters from listeners, information for the public to deal with the FCC, any FCC actions, information about programming, and other station information. Regular maintenance of this file is an essential requirement to maintaining an FCC license.
- Emergency Alert System (EAS)
 Nearly every radio station in the U.S. must have installed and operating EAS equipment that is tested weekly to assure correct operation. This equipment, as a minimum, must relay special presidential announcements as well as certain system testing messages.

The EAS system is installed in such a way that it can interrupt any programming taking place. There is an option that most tests and announcements can be delayed up to 15 minutes by the radio station to better fit into programming.

Results of EAS tests must be kept for a period of time and available for FCC inspection.

Any of the Chief Operator's duties may be delegated, but, ultimately, the Chief Operator is still responsible that these duties are carried out in a timely fashion. The official Chief Operator

designation by station management must be posted with the station's license and other operating documents.

Other Duties

There are a variety of other positions and duties that normally take place in a radio station, but these are assigned and completed at the discretion of the station owner.

Most stations will have a *General Manager* or *Station Manager*. This person is responsible for the entire operation, and can be the Chief Operator as well, especially for smaller stations. The General Manager assigns and/or performs most of the other duties at the radio station.

A *Program Manager* is the person in charge of setting the program schedule, making changes to that schedule, special programming and most of the actual audio signal aired over the station. Related to this position is the *Music Director*, (for stations that play music) who decides what kind of music to play, when to add or delete songs, the types of music and in what order the songs play. Smaller stations will not normally have a dedicated music director, but rather rely on computer software to set music order and to add or remove songs, while the Program Manager sets the operating parameters of this music selection system.

Board Operator, DJ ("Disk Jockey", a term we would not normally use) or just simply Operator refers to the person that is actually at the station's controls. This person may simply start and run the programs to be aired, or may actually announce music song titles and artists, or even give short devotions live over the air.

Production Director or *Production Manager* is the person that puts together programs that are made, or *produced*, at the radio station. These can be anything from commercials or sponsorship announcements, special *jingles* that help identify the station, to full-length programs that may be aired weekly or on special occasions.

Sales Executive, Account Executive or Salesman refers to a person that is responsible for finding and signing up advertisers (commercial stations) or sponsors (non-commercial stations). This type of person is necessary if the station is not solely supported by listener contributions.

There are variations on these positions that are used by many radio stations. Since the radio broadcaster can set up their operation pretty much any way they choose as long as they are in compliance with the law, there are as many variations on operators and duties as there are radio stations.

Licensing Process

Perhaps the most difficult step and the most common obstacle in starting a church-based radio station is obtaining the authorization to construct and operate your radio station. There is a great demand by a large number of parties for radio stations, while the availability of frequencies is quite limited. Still, it is possible for a church to become a radio broadcaster in these times.

Due to the fact that there are only so many broadcast frequencies available in a particular area, and that demand for radio stations is proportional to the population of the area, churches that are located in more rural areas are more likely to succeed in securing a license over those that are in or near a metropolitan area.

The Federal Communications Commission, or FCC, (sometimes referred to as *The Commission*) is responsible for allocating frequencies, preventing interference, and assuring that broadcasters meet their community service obligations. All broadcast licenses in the United States are issued by the FCC.

The licensing process works differently for commercial and non-commercial stations.

For non-commercial stations (the most common ones used by churches), including LPFM and translators, here is an outline of the process:

- Filing Window
 - The FCC periodically announces a *filing window*, which is a period of time that applications will be accepted for a certain station type. Since, in today's "information age", huge numbers of applications are now being filed, the FCC has very few filing windows and then spends a large amount of time, sometimes years, sorting out the applications and granting or denying each one based on criteria that has been established in their rules.
- Completing and Submitting the Application
 This is, in KaraTek's opinion, the most critical part of the application process.
 Applications should be prepared with high quality engineering and legal advice to give the applicant the best possibilities of getting their construction permit. Decisions made here can have a large impact on the applicant receiving a construction permit to build a radio station. Note that, although there are usually no fees to the government for a non-commercial station, KaraTek recommends reserving funds to use quality consultants, as these fees are usually a very small part of the entire radio station construction budget.

Nearly all FCC applications are now submitted through the Internet, and must be done during an appropriate filing window.

Determine Application's Merits and any Mutual Exclusivity
 After the closing of the filing window, the FCC reviews all applications and determines which are valid, and which are incomplete or without merit. If an application is not properly prepared, the FCC may reject it outright, or may contact the applicant to correct minor errors. A seriously flawed application will be rejected with no recourse but to wait for the next filing window.

The next step in the review process it to check each application to see, if built, whether it would interfere with another application that was received in the filing window, as defined by the FCC. Applications that have no conflicts with other applications are referred to as *singleton* applications, and are routed to final review and award of a *construction permit* (authorization to build the station). Usually, singleton stations are issued construction permits a few months after the filing window closes.

Those that would interfere with each other are referred to as *Mutually Exclusive*. These are placed in groups of applications, called an *MX Group*, for further review. The FCC has a series of ranking criteria to determine which of the applications is most desirable, and usually grants that application and denies all others in the group. In rare cases, more than one applicant will be granted and a *time sharing agreement* will be executed so that only one is on the air at a time. Another way of settling mutually exclusive applications is for all members of the group to propose a *settlement* to the FCC.

Needless to say, when applications become mutually exclusive, the process becomes much more complicated and takes a lot of time, sometimes years, before the final outcome is complete. KaraTek International can also help an organization to help resolve a mutually exclusive situation in their favor if at all possible.

Construction Permit

Once an application has been approved by the FCC, a *Construction Permit* is issued, authorizing the construction of the station. This permit specifies the parameters to which the radio station must be built, including how much power, any special antenna design, how high an antenna is to be mounted, along with other technical details. If there are any limitations on the operation of the station, such as time sharing agreements, or requirement for special approvals, they are also noted on the construction permit.

Note that an applicant cannot start any of the construction process without a construction permit. Equipment can be procured ahead of time, but not placed at the transmitter site or hooked up in any way.

Normally, a construction permit specifies that the station must be complete and on the air within 3 years or the permit is void.

Program Testing

After completion of the station, the applicant is allowed to start *Program Testing*, which is simply putting the signal on the air and making sure that all equipment is functioning correctly. For some station types, additional data must be supplied to the FCC before placing the station on the air; this is always specified on the construction permit.

Once program testing is complete, the applicant then notifies the FCC that the station is now on the air and functioning correctly.

License

Once the FCC has been notified and there are no problems found with the station, the FCC then issues the station license to complete the licensing process. This is normally a formality but must be done in a timely fashion. Once a station begins program testing, for all practical purposes it is on the air and authorized to be so.

Commercial stations are licensed by a somewhat different process, primarily in the early stages. Note that, unlike the non-commercial process, there is a fee for every step in the commercial filing process, except for the Frequency Allocation step.

Frequency Allocation

Prior to the start of the application process, possible applicants *petition* (file documents with) the FCC asking them to *allocate* a particular frequency (or *channel*) to a community. If the FCC agrees that that channel can be used in that area, it adds the channel to the *Table of Allotments* that is contained in the FCC rules. Note that a channel can be allocated at any time, and does not have to wait for a filing window.

Auction

Currently, the FCC auctions off available channels to the highest bidder, eliminating all other criteria from the settlement process and gaining additional sources of funding for the government. The FCC announces the auction in advance, and all applicants register for all stations they may be interested in.

The auction is conducted online over a specified period of time. The FCC expects a minimum bid for each station. The auction is normally set up so that there are no *singleton* applications, that is, each bidder is eligible to bid on a number of stations.

Note that the FCC has been refining its auction rules, so each auction might be conducted differently. Regardless of this, the concept of awarding construction permits to the highest bidder continues to be the main settlement criteria.

Short-Form Applications

Since each winning bidder may want to build a station somewhat differently than that specified in the original frequency allocation, the FCC requires all winning bidders to

submit *short-form applications* to specify how they intend to build the station. This allows potential conflicts to be resolved before a detailed application is submitted.

Long-Form Applications
 Once the short form application is approved, a long-form application is submitted to the FCC, detailing all the information required for a construction permit.

Approval of the long-form application leads to the granting of a *construction permit*. The process then continues in the same way as the non-commercial station from this point forward.

Note that there are sometimes other licenses and permits that must be secured before station construction can begin. If a tower is being constructed, in most cases the *Federal Aviation Administration*, or FAA must be notified and must approve the construction of the tower. Local zoning and construction permits must also be obtained.

As part of our mission, KaraTek International is ready to provide services to qualified organizations to guide them through this process. We can conduct a preliminary study to determine the feasibility of a radio station for a church, after which we will inform you of the possibility of having your radio station. We then keep all the information from the study available, and place your organization on a list of possible radio broadcasters and then monitor activities at the FCC for upcoming filing windows.

When a window is announced, we review our preliminary study to make sure it is up to date, and then start the application process. Please refer to **Appendix 2** for our Application for a Feasibility Study to begin the process.

License Renewal

Once a radio broadcast license has been issued, the holder of that license is able to broadcast for a period of time, currently 8 years.

When the license is nearing its expiration date, the renewal process begins. Because a radio station is considered a public trust, there must be a period of time where the public can comment on how the radio station has or has not fulfilled its duties.

For operating radio stations, there are two periods of time where announcements must be made over the air indicating that the station license is being renewed and where the listener can make comments for or against license renewal. These announcements must be made at specific times.

Announcements made during the first period are called *pre-filing announcements*. These are made before actually filing the renewal application.

Announcements made during the second period are called *post-filing announcements*, made after the filing of the renewal application.

The renewal application is normally a straightforward process, done electronically over the Internet. It is normally prudent to use the services of a competent FCC communications attorney when filing for renewal to assure that application has been completed correctly.

Note that, as long as the station was operated properly during the renewal period, that there is rarely any problem is securing renewal of the station's license.

Appendix 1 -KaraTek International Statement of Faith and Client Covenant

The following points are a summary of KaraTek International's Statement of Faith. Please read this carefully and contact us if you have any questions regarding any of the points. If you require our complete Statement of Faith, including scriptural references, we will be happy to provide it for you.

- 1. The Holy Scriptures: We believe the Holy Scriptures of the Old and New Testament to be the inspired, preserved Word of God. The Scriptures are inerrant, infallible and Godbreathed, and therefore are the final authority for faith and practice. The sixty-six books of the Old and New Testament are the complete and divine revelation of God to man.
- 2. The Godhead: We believe in one Triune God, eternally existing in three persons: Father, Son, and Holy Spirit.
- 3. The Person and Work of Christ: We believe that the Lord Jesus Christ, the eternal Son of God, was born of a virgin and died for our sins and accomplished our complete redemption, is now raised from the dead and is now exalted at the right hand of God.
- 4. The Holy Spirit: We believe that the Holy Spirit is a person who convicts the world of sin, of righteousness, and of judgment, and that He is the Divine Teacher who assists believers in understanding the Scriptures.
- The Depravity of Man: We believe that man was created in the image and likeness of God, but that in Adam's sin the human race fell, inherited a sinful nature, and became alienated from God.
- 6. Salvation: We believe in salvation by grace through faith in the Lord Jesus Christ and that it does not depend on any works of man, and our salvation is kept by His power.
- 7. The Priesthood of the Believer: We believe in the priesthood of all believers; that Christ is our great High Priest and through Him every born again person has direct access into God's presence.
- 8. The Local Church: We believe in the importance of the local church and that this is God's New Testament institution to accomplish His will. KaraTek serves local churches with services to assist them in accomplishing their God-given mission, and is not in any way a substitute for a local congregation of believers. All KaraTek employees are required to be a member of a local church that agrees with this statement of faith.
- 9. Separation: We believe that all the saved should live in such a manner as not to bring reproach upon their Savior and Lord.

- 10. The Second Advent of Christ: We believe in the second coming of Christ, which has two distinct phases, first for His Church, then to be Judge and King of this earth.
- 11. The Eternal State: We believe in the bodily resurrection of all men, the saved to eternal life, and the unsaved to judgment and everlasting punishment.
- 12. The Personality of Satan: We believe that Satan, the devil, is a created being who fell from his original state and became the author of sin and the cause of the fall of man.
- 13. Creation: We believe that God created the universe.
- 14. Missions: We believe that God has given the church a great commission to proclaim the Gospel to all nations
- 15. Giving: We believe that every Christian, as a steward of that portion of God's wealth entrusted to him, is obligated to support his local church financially, and as moved by the Spirit of God, to support those engaged in spreading the Gospel to this world.

Agreement as Sole Project Leader

In order for KaraTek International ("KaraTek") to accept your project and to work to complete it in a successful and timely manner, you agree to allow KaraTek to be the final authority for all technical decisions on your project, and will not directly engage another party to perform these services while KaraTek is leading your project.

You understand that KaraTek uses a combination of our extensive experience in the installation of radio facilities together with highly trained consultants to reach every technical decision, and that you defer to KaraTek these decisions based on this background and our concern for a project that is both successful and safe for you and the general public.

All decisions made by KaraTek will be with your informed consent, and any costs associated with these decisions will be presented to you prior to commitment of funds. KaraTek is committed to keeping your project as affordable as possible but will not compromise safety or the reliability of your finished project to do so.

KaraTek will endeavor to comply with all local, state and federal laws in the completion of your project. This includes making sure necessary permits are secured and that work is performed, where required, by appropriately licensed and bonded entities. In some cases, you will need to secure these permits, schedule inspections, work with local contractors and perform other work that is necessary to insure that your project is completed within the law.

At the successful or unsuccessful conclusion of your project, KaraTek will cease function as Sole Project Leader and responsibility for technical decisions returns to you or your organization. However, this same agreement may be used for any subsequent projects provided that there are no changes to either party or their ability to meet their respective obligations.

Covenant and Agreement to Comply

I, the undersigned, agree fully with KaraTek International's Statement of Faith as listed in this document. In addition, I agree to comply with the Agreement as Sole Project Leader also listed in this document, placing KaraTek as the final technical authority in accomplishing the work necessary for completion.

Should my project result in the successful installation of a radio station, I further covenant to operate the station to Biblical standards. This station will not broadcast music that does not glorify the Lord Jesus Christ or any music even if identified as "Christian", which emphasizes beat over melody or has lyrics that are hard to understand. Programs will not attack the inspiration or inerrancy of the Bible, and programming that exalts man and his accomplishments over God will not be aired. In addition, I also covenant to operate the radio station for a minimum of 5 years, and not endeavor to sell the radio station during this period as long as it is within my power to do so.

I also understand that, by listing an organization below, I am authorized to make these commitments on behalf of this organization, and that my commitment extends to the organization even if I am no longer a part of the organization at a later time. I understand that KaraTek International, as a faith-based organization, reserves the right to withhold its services from any entity for any reason, including but not limited to doctrinal, operational, limited capacity for accomplishing projects, or insufficient funding.

I further understand that I may terminate this agreement at any time by notifying KaraTek International in writing, and that at such time KaraTek will cease to provide services to myself and my organization.

Signed Signed	Date
Print Name	
Title	
Organization Name	

Official Corresponde	ence Address:		
Phone:			
Cell/Mobile Phone:			
Fax:			
Email Address:			
_	b be filled after document has been faxed	back to the KaraTek Office	
Office Use Only - to		back to the KaraTek Office	
_		back to the KaraTek Office Date	
Accepted By KaraTe	ek International:		

Appendix 2 - Request for Feasibility Study for a Church-Based Radio Station

Please fill out this section together and the agreement and covenant in *Appendix 1* in order to have KaraTek International perform a preliminary feasibility study for your church or organization. In addition, please enclose a copy of your organization's Statement of Faith. Once the feasibility study is complete, if there is a potential for a radio station in your area of the type selected, we will contact you and place you on waiting list(s) for the appropriate FCC filing window.

Name of Organiza	<mark>ation</mark>	
Proposed Location	n of Station transmitter:	
Street Address:		
		,
• .	linates (if known): LatLonLonrces for coordinates are Google Maps or Google Earth)	
Type of station de	esired (check all that might apply)	
☐ AM – Comi	mercial	
☐ FM - Non-C	Commercial	
□ FM - LPFM	1	
☐ FM -Comm	nercial	

Funding for KaraTek Projects is broken into three areas:

- 1. Equipment and consulting services costs
- 2. Installation personnel transportation, lodging and meal costs
- 3. KaraTek staff costs

Each of these costs is done at or near the actual costs of the items, and each can be funded separately. For example, your church might provide funding for equipment and consulting services, while an individual in your church might pay for the transportation, lodging and meal costs, and KaraTek may have sufficient funding to cover its own staff costs.

Desired budget for r	adio station construction:
Desired budget for r	adio station monthly operation:
Explain, in paragrap station:	h form, how you intend to fund the monthly operating cost of the radio
	stions from KaraTek (may be different from the person in Appendix 1 If you
have a technical per	son or project manager)
Name	
Name Address:	
Address.	
	
Phone:	
Cell/Mobile Phone:	
Fax:	
Email Address:	